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Erning Xia

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Bausch & Lomb Incorporated
One Bausch & Lomb Place
Rochester, NY 14604-2701

EXAMINER

BARHAM, BETHANY P

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/725,159
Filing Date: December 01, 2003
Appellant(s): XIA ET AL.

Toan P. Vo
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9/2/08, 8/11/08 and 7/17/08 appealing from the Office action mailed 2/25/08.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| | | |
|-----------|---------|--------|
| 6,274,133 | HU | 8-2001 |
| 5,928,606 | SUGRURA | 7-1999 |

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6,916,958 (used in response to arguments)

PARK

7-2005

<http://www.answers.com/topic/disinfectant> (used in response to arguments)
(Columbia Encyclopedia. The Columbia Electronic Encyclopedia, Sixth Edition
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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 7, 9-12, and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 6,274,133 ('133) in view of US patent 5,928,606 ('606).

The limitations of claims 9-12 and 20-21 are taught by '133 in view of '606:

- '133 disclose a method for treating a contact lens with a solution (abstract). The method comprises contacting the surface of a contact lens with a solution comprising a cationic cellulose polymer, a tonicity agent, and a buffering agent (claim 1). Cellulose polymers are a well-known example of polysaccharides, further polyquaternium 10 or UCARE polymers are taught by '133 (col. 5, lines 39-42).

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- One or more surfactants are taught by '133 in claim 2. Viscosity agents such as PVP K30 are taught and Tetronic 1107 is a known surfactant (Table 2).
- According to '133, a wetting agent can be added to the contact lens solution (Claims 4-5). The wetting agent can comprise mono or disaccharides (claim 5). Thus, the contact lens solution advanced by '133 comprises a cationic polysaccharide and a saccharide.
- It should be noted that the examiner is interpreting a contact lens as a type of medical device.

The limitations of claims 4 and 7 are taught by '133 in view of '606:

- Table 2 and Example 2 teach including Polymer JR or Polymer JR 30M (col. 10, lines 19 and 39-40).
- '133 does not teach glucose or alpha-methyl glucopyranoside, but teaches saccharides generically.
- '606 teaches a device for cleaning and disinfecting a contact lens, and a method of disinfecting a contact lens comprising a wetting agent (abstract) and the wetting agents are taught to include saccharides such as glucose (col. 10, lines 36-52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of '133 with '606, since both teach a method of treating a contact lens for disinfection. Further, '133 discloses a treatment composition comprising polysaccharides such as polyquaternium 10 and polymer JR 30M and tonicity and buffering agents along with wetting agents, one of ordinary skill in the art

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would be motivated to look to '606 for known wetting, tonicity and buffering agents used in contact lens treatment solutions and would find that glucose is a known wetting agent and imparts disinfecting and cleansing properties. As such it would have been prima facie obvious to combine the teachings of '133 and '606 to obtain a method of imparting preservative efficacy to contact lens and medical devices comprising polyquaternium 10 and saccharides such as glucose.

(10) Response to Argument

Appellant argues that '133 in view of '606 fails to establish a prima facie case of obviousness for the following reasons (A and B):

(A) That '133 and '606 does not teach all of the elements of the instant claims and that there is no rationale in the prior art for combining glucose and cationic cellulosic polymers effective as a preservative. Further, appellant mistakenly states that "the Examiner has ignored" the limitation of "amounts effective for solution preservation" (appeal brief, pg. 4, last paragraph).

The examiner respectfully disagrees with these assertions. Appellants argue that there is no prima facie case of obviousness and no motivation to combine '133 in view of '606, and the examiner respectfully points out that appellant's argument against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re*

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Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

It should be noted that the motivation to combine references can be different from the ones set forth by Appellant. That is, as long as motivation exists to combine the elements, the problem to be solved does not have to involve the same reason for imparting preservative efficacy to a solution. As such, the examiner respectfully submits that there is motivation to combine the teachings of '133 in view of '606 and the expected result of treating, cleansing and disinfecting a contact lens. '133 teaches a contact lens cleansing solution combining polyquaternium 10 with a wetting agent such as a mono- or di-saccharide (generically), while '606 teaches wetting agents comprising additional components including saccharides such as glucose for treating and disinfecting contact lenses.

A skilled artisan would know how to substitute one known monosaccharide of '133 for the specific monosaccharide glucose of '606 when both teach they are safe for use in contact lens solutions as such a substitution is not outside the purview of the skilled artisan. As such a composition of '133 for treating contact lenses comprising polyquaternium 10 and a monosaccharide such as glucose of '606 would cleanse and disinfect the lenses according to the prior art. Disinfectant is defined by the Columbia Encyclopedia as an "agent that destroys disease-causing microorganisms and their spores...[and] some disinfectants, especially chlorine and chlorine compounds, are also used as preservatives" (<http://www.answers.com/topic/disinfectant>). Further, according to US Patent 6,916,958 polymeric quaternary ammonium compounds such as

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polyquaternium are useful in disinfecting or preserving ophthalmic compositions/contact lenses and teach that the amount effective to preserve is overlapping with the amount effective to disinfect (col. 6, lines 5-29). As such it appears that Appellant is claiming a known characterization and disinfecting and preserving qualities are related and similar. Further, the prior art ('133 in view of '606) teaches a composition and process for treating contact lenses with said composition as described by appellants instant application, but appellants observation that it also has 'preservative efficacy' does not give it patentable weight, since it is the same composition and same process of treating to cleanse and disinfect, as adding a known characterization to a prior art patented invention is not patentable.

The Examiner also disagrees with Appellant's statement that the Examiner has ignored the limitation of "amounts effective for solution preservation". Appellants have not provided a meaningful definition of "effective amount" or "solution preservation" and limitations with respect to percent weight or ranges of glucose and/or the cationic polysaccharide are not present in the instant claims. The limitations of the instant claims are being given the broadest reasonable interpretation and the prior art solution that has glucose and the cationic polysaccharide which effectively cleanses and disinfects meets the limitation absent any metes and bounds to the instant claims. Further the Appellant's instant specification teaches 0.005-0.5% of saccharide [0017] and 0.005-0.1% cationic polysaccharide [0020], while the prior art teaches overlapping amounts of 0.1-2% wetting agent (saccharide) ('133 col. 7, line 19) and 0.01-1% cationic cellulosic polymer such as polyquarternium 10 ('133 col. 5, lines 6-7). Thus the

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prior art teaches overlapping ranges of saccharide and the cationic polysaccharide and as such the broadly instant claimed "effective amount" would appear to be obvious in view of the art.

(B) Appellant's further argue that "a person of ordinary skill in the art would not have used glucose in an aqueous solution as part of a preservative" (appeal brief, pg. 6, 3rd paragraph) and that the prior art teaches other disinfectants (appeal brief, pg. 6, 5th paragraph).

The examiner respectfully disagrees with these assertions. As detailed above contact lens solutions are taught to contain saccharides ('133 claim 5 and col. 7, lines 20-21 and '606 col. 10, line 51) and cationic polysaccharides. Both '133 and '606 teach saccharides in a cleansing solution ('133 generically, while '606 teaches that the wetting agent can contain additional components such as glucose specifically) and '133 teaches that the solution prevents the growth of lipids, proteins, and other products (abstract), while '606 teaches cleaning and disinfecting a contact lens, and a method of disinfecting a contact lens comprising a wetting agent (abstract). As such a person of ordinary skill in the art would know that the contact lens solutions which cleanse, disinfect and prevent growth of various products can contain saccharides and polysaccharides as taught by the prior art ('133 in view of '606).

Appellant argues that the references teach additional disinfectants such as biguanide, etc, however the Examiner points out that Appellant's instant claims recite

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the open 'comprising' language and do not exclude the addition of other components to the solution.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Bethany Barham/
Examiner, Art Unit 1615

Conferees:

/MP WOODWARD/
Supervisory Patent Examiner, Art Unit 1615

/Frederick Krass/

Supervisory Patent Examiner, Art Unit 1612